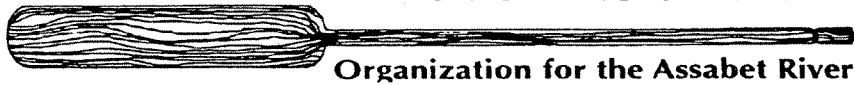




APPENDIX G
PUBLIC PARTICIPATION MATERIAL (OAR REPORT)

O.A.R. Acton Stream Teams '98



Final Report Acton Shoreline Survey, Spring 1998

By Mary S. Michelman



A collaborative effort among
The Organization for the Assabet River, The Town of Acton,
Acton Citizens for Environmental Safety,
and the Acton Water District.

Funded by a grant from the Crossroads Community Foundation



O.A.R. Acton Stream Teams '98




Organization for the Assabet River

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O.A.R. Acton Stream Teams '98



Organization for the Assabet River

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Thank you to **Joan Kimball** and the **Massachusetts Riverways, Adopt-A-Stream Program of the Massachusetts Division of Fish, Wildlife and Law Enforcement** for providing the volunteer training, facilitation and expert advice. Thank you to **Nancy Bryant** of the **SuAsCo Coalition** for helping to facilitate the Nashoba Brook Priority Setting and Action Planning Meetings. Thank you to **Denise Schwartz** for designing the Stream Team buttons, T-shirts, and to **Acton's Earth Day Committee** for its donation towards the Stream Team buttons. Thank you to **Joan Kimball, Sue Beede, Julia Blatt, Doug Halley, Tom Michelman, Mary Crain Penniman, Charlotte Sagoff, Maya Spies, Lisa Wolf** and others for reviewing the draft final report and for providing valuable input.

Thank you to all the members of the four follow-up Task Forces formed on June 24, 1998. A special thank you to the following for volunteering to be the Contact Persons for the Task Forces: **Nan Towle Millett** (Cleanup), **David Brown** and **Sieg Moyr** (Rail Trail Development and Trail Linkages), **Mark Benedict** (Stewardship), and **Rodney Brown** and **Cory Stach** (Website). Thank you to **Denise Schwartz** and **Amethyst Graphics** for designing the Cleanup Day flyer, and to **Nancy Hunton** for submitting Stewardship articles to the *Municipal Quarterly* and *Water Words* publications.

The Acton Stream Teams greatly appreciate the valuable suggestions, hours of planning and logistical support provided by the Acton Stream Team Steering Committee, whose members include: **Mark Benedict, Priscilla Bolte, Dean Charter, Kate Crosby, Doug Dunbar, Bob Eisengrein, Steve Fogg** and **Toby Fedder** of **Woodard & Curran**, **Bob Guba, Doug Halley, Dick Hatfield, Bob Johnson, Matt Liebman, Mary Michelman, Barbara Offenhartz, Pam Resor, Denise Schwartz, Maya Spies, Nancy Tavernier, Tom Tidman, and Lisa Wolf.**

Thank you also to the following local businesses for their generous donations of goods and services: **Ames Department Store, Bagels Plus, CVS, Creative Camera & Frame Company, Osco Drug, and Roche Brothers.** Thank you to the following for their media coverage: **Kristie Bartlett** and **Acton Cablevision; Jill Pontius, Dan Shohl, and The Beacon;** and **Christine Cole** and *Northwest Weekly, The Boston Sunday Globe.*

Thank you and congratulations to the **more than 150 volunteers** who donated their time and effort to the Acton Stream Teams. Their contributions included making Stream Team Buttons, distributing leaflets on election day, conducting the shoreline survey, data management, web page design, putting together a photographic inventory of the streams, attending follow-up meetings, carrying out follow-up investigations, assisting with public displays, planning and participating in the September 12, 1998 Stream Cleanup and much more. **This Shoreline Survey would not have happened without them.** These volunteers include those listed on the next page.

Thank you and Congratulations to the following Acton Stream Team Volunteers!

Peter and Sue Balkus
Jenna and Dave Barr
Mark Benedict
Doug Bent
Priscilla Bolte
Susan and Ryan Bray
David, Carol and Lyndsay Brown
Rodney and Patrick Brown
Nancy Bryant
Kathy Button
Susan Carlson
CASE High School Students
Mark Chandler
Dean Charter
Janet Clark
Karen and Emily Coll
Jim and David Corwin
Lia Cowley
Kate Crosby
Norm, Kathleen & Suzanne Decker
Jim Deming
Joan Domenica
David Downing
Doug Dunbar
Linda Duvel
Bob Eisengrein
Ellen Emberton
Toby Fedder
Steve Fogg
Tom and Joshua French
Elinor Gentilman
Tom Gormley
Bob Guba
Melissa Haley
Doug Halley
Dick Hatfield
Susan Hipsky
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Michael Huffaker
Therese, Diana & Daniel Huffaker
Nancy, Don and Daniel Hunton
Linsey Hurley
Vina Hyde
Betsy Comstock and Bob Johnson
Jamie Johnson
Moe and Michelle Joyal
John Moy & Sonya Keene
Lee Ketelsen
Gary Kilpatrick
Liz and Dana Kintigh
Liz Kotowski
Carol Lake
Kanayo Lala

Sam, Gretchen, & Denny Lawton
Elizabeth Lenzen
Matthew Liebman
Larry Lombardo
Christine MacDonald
Lindsay Mannix
Dave Marshall
Merriam Elementary School students
Karen McCarthy
Mary McLane
Judy Michalowicz
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Lukacic
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Susan and David Mitchell-Hardt
Eileen Morange
Siegfried Moyr
Gwen Murphy
Pam Nourse
Karen Null
Barbara Offenhartz
Nancy O'Hara
Cory Stach and Samantha Parker
Mary Crain Penniman and Bill Brumback
Phyllis Proctor
Barbara Rabb
Betsy Read
Al Reeps
Pam Resor
George Riner
Warren Leon and Cindy Robinson
Charlotte Sagoff
Gail Sawyer
Denise Schwartz
Joanne Shusta
Barbara Smith
Jim Snyder-Grant
Susan and David Spector
Maya Spies
Betsy Stokey
John Swallow
Richard and Ellen Swenson
Nancy and Dick Tavernier
Tom Tidman
Susan Triantafillou
Allen Warner
Gabrielle Watson
Lee Weaver
Paul White
Lisa Wolf
Norma Wu

B. Executive Summary:

The Organization for the Assabet River (OAR) received a grant from the Crossroads Community Foundation in December 1997 to form volunteer stream teams to conduct a spring 1998 shoreline survey in the town of Acton. OAR is a non-profit group founded in 1986 to protect, preserve and enhance the natural and recreational features of the Assabet River and its watershed. OAR's project partners included the town of Acton, Acton Citizens for Environmental Safety (ACES, a local grassroots environmental group), and the Acton Water District (AWD). All of these project partners share an interest in identifying and reducing potential sources of pollution and excessive nutrients to Acton's streams, especially since Acton is currently pursuing the option of "watershed trading" to solve its existing waste water management problems.

In January 1998 Mary Michelman was hired by OAR to create and coordinate the Acton Stream Teams. She formed a Steering Committee, whose members represented Acton Town officials, Acton's State Representative, local industry, local citizen groups, and other interested residents. Michelman and the Steering Committee publicized the Stream Team project, selected survey areas, generated and reviewed maps, and finalized plans for the training session, the survey itself, and follow up actions. As a result more than 150 Acton volunteers participated in some aspect of the Stream Team effort.

The goal of the Stream Teams was to make a visual survey of the two primary stream systems in Acton: the Nashoba Brook system (including the incoming streams, Butter Brook, Will's Hole Brook and Conant Brook) and the Fort Pond Brook system (including the incoming streams, Guggins Brook, Inch Brook, Grassy Pond Brook, Pratt's Brook and Coles Brook). Both stream systems feed into the Assabet River. The Stream Teams hoped to identify and reduce sources of pollution and excessive nutrients to Acton waterways, and to raise awareness of the wildlife habitat and recreational opportunities provided by Acton's local streams.

Joan Kimball of the Riverways/Adopt-A-Stream Program led a volunteer training session on April 22, 1998. Protocols for the Shoreline Survey and the Action Planning process are contained in the Shoreline Survey Leaders' Guide, MA Adopt-A-Stream Program (Department of Fisheries, Wildlife and Environmental Law Enforcement, May 1996).

Between April 22 and May 7, 1998, more than 120 Acton volunteer members of the Fort Pond Brook and the Nashoba Brook Stream Teams conducted the Spring 1998 Acton Shoreline Survey of thirty-six stream sections, covering approximately 25 miles. Stream sections were visually surveyed and data sheets were completed. Stream conditions and field observations of vegetation types, wildlife sighted, and other note worthy observations were recorded. Pipe, bridge, and wetland surveys were also completed, as appropriate. Photographs were taken and time, date, location and photo descriptions were recorded in photo logs. Locations of relevant observations were noted on the survey maps. Volunteers also wrote narrative descriptions of their stream sections.

On May 7, 1998 the volunteers came to a "Priority Setting" meeting at Acton Town Hall to report their findings. Volunteers noted that generally the streams in Acton appear to be in very good shape and are wonderful resources. There were, however, some specific problems or needs that should be addressed.

Volunteers created Priority Sheets by listing the assets and problems found in each stream section. These were then reviewed by the volunteers to determine which of these were priorities.

Assets identified by the two Stream Teams included:

- Stream habitat supporting abundant, diverse wildlife
- Historic sites
- Recreational opportunities including:
 - a. hiking
 - b. canoeing
 - c. fishing
 - d. scenic views

Potential problems identified by the Stream Teams included:

- trash
- pipes and culverts needing cleaning/lookup
- areas with a "sheen" on the stream surface
- buffer/yard waste concerns
- concerns about the impact of future developments on the streams
- plant species that may indicate excessive nutrient loading
- dams, both human and beaver-made.

On May 21, 1998 the Fort Pond Brook and Nashoba Brook Stream Teams each designed an Action Plan to address some of the needs identified by the survey. These plans included sharing information with relevant Town Boards and officials and the identification of short and long term projects in the following categories:

- Cleanups
- Stewardship
- Buffers
- Outreach/Education
- Land Protection
- Recreation
- Research

On June 24, 1998 Stream Team volunteers created four ongoing task forces (Cleanup, Stewardship, Website, and Rail Trail Development/Linkage) to begin working on specific projects. Their plans included a cleanup on September 12, 1998 for selected stream areas that showed the most need; the development of stewardship materials; a website that

would be accessible by sometime this fall; and the investigation of trail linkage between Jones Field and the Overlook Trail in South Acton.

Achievements of the Acton Stream Teams, as a result of the Acton Shoreline Survey include the following:

- Raised stream awareness: Over 150 volunteers were involved in the effort. There have been four relevant newspaper articles in *The Beacon*, and one in the *Boston Globe*. Acton Cablevision broadcast the April 22, 1998 Volunteer Training Session nine times before May 7, 1998.
- Provided data for Acton's environmental consultant, who may use some of the data to help determine appropriate locations for the implementation of Best Management Practices (BMP's) to minimize nutrient input to the streams.
- Created a photographic inventory of over 350 photographs.
- Formed four Task Forces, (Cleanup, Stewardship, Website and Rail Trail Development/Linkage), described above.
- Gave presentations to the Acton Board of Selectmen, Acton Board of Health, Acton Conservation Commission, and the OAR Board of Directors.
- Submitted an Acton Stream Team article to the EPA publication *Watershed Events* for the fall 1998 issue.
- Organized and carried out a Stream Cleanup on September 12, 1998, along sections of Butter Brook, Coles Brook, Conant Brook, and Fort Pond Brook in Acton. Volunteers removed twenty-five bags of litter, along with various larger debris including tires and other car parts from the stream areas.
- Distributed stewardship/public education articles to Acton taxpayers and water takers in the *Municipal Quarterly* and *Water Words* publications.
- Made shoreline survey maps and results available online at: www.ultranet.com/~balkus_p/stream.htm and at www.ultranet.com/~oar/stream
- Created a map and photographic display that raises stream awareness and also provides information on the importance of buffers and good stewardship practices.
- Earned a **Certificate of Appreciation** from the United States Environmental Protection Agency "in recognition of commitment to the protection and restoration of the nation's water resources".
- Wrote a Final Report on the Acton Shoreline Survey, Spring 1998. A copy will be available at the Acton Memorial Library.
- Scheduled a public slide presentation of the results of the Acton Shoreline Survey for Monday October 26, 1998, at 7:30pm in Acton Town Hall, Room 204. This presentation, which includes photographs from the survey, will help to educate the public about good stewardship practices.
- Earned two "**Adopt-A-Stream**" Awards, to be presented to the Nashoba Brook and Fort Pond Brook Stream Teams by Joan Kimball of the MA Riverways Program, immediately following the slide presentation on October 26, 1998.

The Acton Stream Teams look forward to continuing to raise public awareness of the wildlife habitat and recreational opportunities provided by Acton's local streams, and also of ways we can all be better stewards of our rivers and streams.

Certificate of Appreciation

presented to

Acton Stream Teams

in recognition of commitment to the protection and restoration
of the nation's water resources



*Adopt
your Watershed*

Robert H. Wayland, Director
Office of Wetlands, Oceans, and Watersheds
United States Environmental Protection Agency

**EARTH IS
A WATER
PLANET**



Clean Water Act

ANNIVERSARY

C. Administration, Formation of the Acton Stream Teams

1. Project Partners

The Acton Stream Teams were formed as a collaborative effort among the following groups:

The Organization for the Assabet River: OAR is a non-profit group founded in 1986 to protect, preserve and enhance the natural and recreational features of the Assabet River and its watershed. Since the town of Acton is entirely within the Assabet River watershed, identification and reduction of pollution sources to Acton's waterways would also have a positive effect on the Assabet River. OAR seeks to raise public awareness of how to be good stewards of all of our rivers and streams.

OAR secured the grant for the Acton Shoreline Survey. Under the grant Mary Michelman was hired to create and coordinate the Stream Teams. In addition to staff time, the grant paid for office supplies, film development, flyers, presentations, report production, Stream Team mailings, etc. OAR also provided supplies for the September stream cleanup and administrative support, including computer, copying, and phone facilities, as well as valuable advice and guidance.

The Town of Acton: With the encouragement of the US EPA and Mass DEP, Acton is currently pursuing the option of "watershed trading" to help solve its existing waste water management problems. This option requires the town of Acton to identify and significantly reduce "non-point" sources of phosphorous pollution to Acton's waterways. In exchange the town would be granted a discharge permit for a new state-of-the-art waste water treatment plant (designed to minimally increase the phosphorous loading of the Assabet River.) The town is very interested in public education as one means of helping to reduce phosphorous loading from residential areas, businesses, farms and roads to the streams, via runoff and ground water.

Various Acton town staff and officials were involved in the planning, execution, and follow-up of the Shoreline Survey. Their contributions included serving as Steering Committee members, being Area leaders, participating in the survey, and assisting with follow-up projects. The Town also provided meeting, copying, and GIS map-making facilities. Town staff used the GIS system to identify abutters to the survey stream sections and to print mailing labels for the March mailing to them. In August the Board of Selectmen passed a motion to assist the Stream Teams in their follow-up Stewardship and Cleanup efforts. The Town provided a truck, and other resources for the September 12, 1998 stream cleanup day. Acton published two Stream Team articles in the *Municipal Quarterly* publication that is mailed by the town to all Acton

taxpayers. These articles assisted the Stream Teams with publicity and volunteer recruitment before the survey, and with stewardship and public education efforts after the survey. The town provided advice, cooperation and assistance throughout the project.

Acton Citizens for Environmental Safety: ACES is a grassroots community group fighting for the public on the issues of health, the environment and toxics. ACES was founded in January of 1979 by Acton residents alarmed by contamination of groundwater and soil at the Acton W.R. Grace site (later designated by the U.S. EPA as a "Superfund Site"). Over the years ACES research and continuous publicizing of the state of contamination at the W.R. Grace Site, as well as of other environmental and health issues have won the respect of the local community. ACES has long been concerned about the conditions in the Assabet River and is eager to help reduce the pollution.

ACES' Technical Director was a member of the Acton Stream Team Steering Committee, as well as an Area Leader, and a Team Leader for the survey itself. The President of ACES reviewed the Draft Final Report of the Acton Shoreline Survey, and offered valuable editorial and practical advice. Throughout the project ACES provided helpful input, suggestions, and support. ACES guidance with some of the follow-up projects was especially valuable.

Acton Water District: The AWD is a separate municipal entity, created by an act of the Massachusetts State Legislature, that is responsible for providing clean, safe drinking water to Acton water takers. As such the AWD is interested in working in partnership with the town of Acton to reduce phosphorous loading to local waterways. Construction of a waste water treatment facility which replaces failing individual septic systems is ultimately of great benefit to AWD takers.

The Acton Water District was very supportive of the Acton Shoreline Survey. The AWD Manager was a member of the Steering Committee and participated in the survey. The Acton Water District provided support for the September 12, 1998 Stream Team cleanup effort, including parking facilities and a truck for trash disposal. It will distribute stewardship and public education articles in its semiannual publication, *Water Words*, which it mails to all Acton water takers. The AWD Manager also offered cooperation, advice and information in reference to water quality questions.

Crossroads Community Foundation: Incorporated in 1995 and a 501 (c)(3) charitable organization, the Crossroads Community Foundation is a collection of permanent and nonpermanent funds or endowments, combined for investment purposes, whose income is used for grants to non-profit charitable organizations in the Metrowest region of Boston, Massachusetts.

The Crossroads Community Foundation provided the grant which funded the Spring 1998 Acton Shoreline Survey.

The first four project partners, listed above, share an interest in identifying and reducing potential sources of pollution and excessive nutrients to Acton's streams. They were brought together under a grant by the Crossroads Community Foundation to form volunteer Stream Teams to conduct a Spring 1998 Acton Shoreline Survey.

2. Objectives

The goal of the Stream Teams was to make a visual survey of the two primary stream systems in Acton: the Nashoba Brook system (including the incoming streams, Butter Brook, Will's Hole Brook and Conant Brook) and the Fort Pond Brook system (including the incoming streams, Guggins Brook, Inch Brook, Grassy Pond Brook, Pratt's Brook and Coles Brook). Both stream systems feed into the Assabet River. The Stream Teams hoped to identify and reduce sources of pollution and excessive nutrients to Acton waterways, and to raise awareness of the wildlife habitat and recreational opportunities provided by Acton's local streams.

3. Project Structure

a. Planning and Publicity

In January 1998 Mary Michelman was hired by OAR to create and coordinate the Acton Stream Teams. She contacted municipal, business and local community leaders and spoke to them about the upcoming Shoreline Survey. Michelman formed a Steering Committee which included representatives from the following:

- Town of Acton - Board of Selectmen, Board of Health, Health Department, Department of Natural Resources, Municipal Properties, Sewer Action Committee, Conservation Commission, Land Stewardship Committee;
- Massachusetts State Government – (Acton's State Representative)
- Local Industry;
- Citizen Groups - ACES, (Acton Citizens for Environmental Safety); Acton Earth Day Committee; and
- Other Interested Residents.

The Steering Committee met four times throughout the winter and early spring. Michelman and the Steering Committee publicized the Stream Team project, selected survey areas, generated and reviewed maps, and finalized plans for the volunteer training session.

The local newspaper, *The Beacon*, published articles, with photographs, in January (page 3), and April (front page) about the Acton Stream Teams. Volunteers signed up during a Special Town Meeting in January and the Annual Town Meeting in April, as well as by contacting Mary Michelman at other times. In mid-March a letter was sent out to owners of property that abuts stream sections to be surveyed, informing them of the survey, inviting them to join the effort, and eliciting any questions or concerns. The Stream Teams were also publicized through town-wide flyer distribution, a limited mailing, and

during an annual Town election in March. Stream Team buttons were given out to all survey volunteers. Stream Team t-shirts were sold at the Training session and at follow-up meetings. Area businesses generously donated 36 disposable cameras for use during the Acton Shoreline Survey, as well as a discount on film development; and videotapes, coffee, and refreshments for the volunteer Training Session.

Steering Committee members, volunteers and potential volunteers were kept updated about stream team progress by phone, letter, email, and in person. Michelman promptly wrote and mailed thank you letters to all businesses and volunteers for their generous contributions of goods, services, time, and effort to the Acton Stream Teams.

A timeline of landmarks leading up to, and following the Acton Shoreline Survey can be found at the end of this report. (See Figure 3.) Copies of publicity and administrative materials, including flyers, meeting agendas, letters, newspaper and other articles, materials from volunteer meetings, and cleanup documents can be found in **Appendix A: Publicity and Administrative Materials**.

b. Survey Design

There are two main stream systems in Acton: the **Fort Pond Brook** system and the **Nashoba Brook** system. (See Map, Figure 1.) Fort Pond Brook enters Acton at the Boxborough and Littleton borders. Nashoba Brook enters Acton at the Westford border. Each main stem has several tributaries draining into it. The two streams flow through Acton and just after crossing the border into Concord, converge at Warner's Pond and soon thereafter, flow into the Assabet River.

For logistical reasons, all of the streams in Acton could not be included in this first-time shoreline survey. A decision was made to concentrate on the two main stems of Fort Pond Brook and Nashoba Brook and portions of some of their tributaries. Seven general stream areas were identified for inclusion. These areas were named from downstream to upstream within each stream system, and, for administrative purposes, given color designations as noted below:

Fort Pond Brook System

- Area A (Red)**=Fort Pond Brook, mainstem, downstream of Rte. 27;
- Area B (Orange)**=Fort Pond Brook tributary, Coles Brook;
- Area C (Yellow)**=Fort Pond Brook tributary, Pratt's Brook;
- Area D (Green)**=Fort Pond Brook mainstem, upstream of Rte. 27;
- Area E (Blue)**=Fort Pond Brook tributaries upstream of Rte. 111 crossing near Knowlton Drive (including portions of Grassy Pond Brook, a tributary in Indian Village, Guggins Brook and Inch Brook);

Nashoba Brook System

Area F (Purple)=Nashoba Brook mainstem, downstream of Rte. 2A @ Rte. 27, and Conant Brook west of Nagog Hill Road; and

Area G (Brown)=Nashoba Brook, mainstem upstream of Rte. 2A @ Rte. 27, and portions of Will's Hole Brook, and Butter Brook.

These Areas each included between four and six stream "sections" to be surveyed by volunteers. Upstream and downstream borders and a unique "section" code were used to identify each stream section. (The "section" codes began with either FP [Fort Pond Brook system] or NB [Nashoba Brook system]). Two Stream Teams would be formed to survey Acton's streams: The Fort Pond Brook Stream Team would survey twenty-five stream sections in five areas and the Nashoba Brook Stream Team would survey eleven stream sections in two areas. (See Organizational Chart, Figure 2.)

Two Acton Stream Teams: Fort Pond Brook, and Nashoba Brook

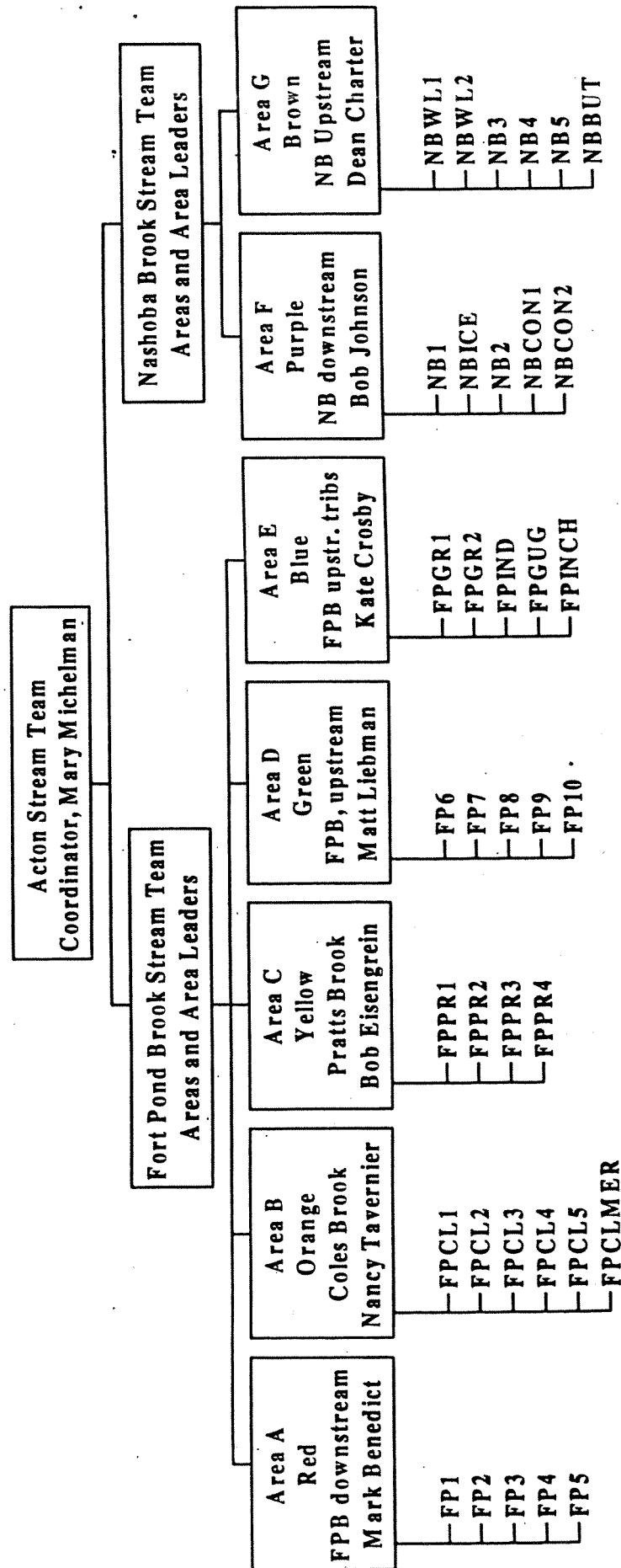


Figure 2. Acton Stream Team Organizational Chart

D. Volunteer Program

1. Training

On April 22, 1998 Joan Kimball of the Riverways/Adopt-a-Stream Program of the Massachusetts Division of Fish, Wildlife and Law Enforcement, led a volunteer Training Session in Acton Town Hall. She provided handouts of sample Shoreline Survey data sheets designed by the Massachusetts Adopt-A-Stream Program (attached). Kimball presented a slide show and led a discussion about what to look for during a shoreline survey. Mary Michelman, Acton Stream Team Coordinator, then gave an overhead presentation about Acton's streams and some local logistical considerations for the volunteers.

Michelman's presentation included the fact that a letter was sent out in March to property owners whose land abuts stream sections included in the survey. This letter informed them about the survey and asked them to contact the Stream Team Coordinator or the OAR office with any questions or concerns. Subsequently two individuals contacted Michelman. At their request two small ponds were not included in the survey. Several volunteers attending the Training Session had questions about the possibility of being on private property during the survey. Joan Kimball stated that volunteers did not need to be concerned if they were surveying from a canoe or were otherwise traveling on or in a navigable stream. Volunteers were encouraged to survey streams in their own neighborhoods and to talk to their neighbors and stream abutters about the survey before beginning it. Volunteers were told that they should always respect the rights of property owners.

Volunteers then signed up for the stream sections they wished to survey and decided upon a Team Leader for their section. The Team Leader was responsible for that section's packet of materials. These included: an 11"X 17" map of the stream section (generated by Michelman using Acton's Geographic Information Systems [GIS] mapping software), the Adopt-A-Stream data sheets, a copy of the letter sent to abutters in March, background information on the project, a team sign-up sheet, a photo log and a disposable camera (donated by local stores). Over eighty-five volunteers attended the training session, which was also recorded by the local cable television company. Cablevision rebroadcast the training session nine times between April 23 and May 4, and also provided video tapes of the training for the Acton Memorial Library.

2. Conducting the Survey

More than 120 volunteers carried out the Shoreline Survey between April 22 and May 7, 1998. Stream sections were visually surveyed and data sheets were completed. Stream conditions and field observations of types of vegetation or wildlife sighted, and other noteworthy observations were recorded. Pipe, bridge, and wetland surveys were also completed, when appropriate. Photographs were taken and time, date, location and photo descriptions were recorded in photo logs. Locations of relevant observations were noted

on the survey maps. Volunteers also wrote narrative descriptions of their stream sections (attached).

3. Post-Survey Priority Setting

On May 7, 1998 volunteers gathered at Acton Town Hall to turn in their completed surveys and to outline the problems, assets and priorities identified in each stream section. The volunteers divided up into the Fort Pond Brook and Nashoba Brook Stream Teams to separately report their observations. Both Teams had lively discussions as they highlighted and prioritized their findings, section by section, from upstream to downstream. The resulting Priority Charts are attached.

4. Action Plan Development

On May 21, 1998 volunteers again gathered at Acton Town Hall. The two Stream Teams met in separate rooms to each develop an Action Plan based on the results of the Shoreline Survey. Printed copies of the draft Priority Charts as well as each stream section's narrative description were available for review, correction, and as guides for developing the Action Plans.

Volunteers carefully reviewed the priorities and other findings from each stream section and decided whether each item should be addressed, and if so which of the following was the appropriate venue:

- Information Sharing: with appropriate Town Boards or other officials such as the Acton Conservation Commission, the Acton Board of Health, the Acton Highway Department, Acton's environmental consultants, Woodard & Curran, the Massachusetts's Highway Department, or Acton's Planning Department.
- Short Term Project
- Long Term Project

The resulting Action Plans are attached.

At both the Action Plan and Priority Setting meetings volunteers verbally related concerns that had not been recorded on the survey data sheets and yet had been observed and should be included in the written material. Some of these additional items are included in the Priority Sheets and Action Plans.

5. Acting on the Plan

a. Information Sharing Approach

The Action Plans include items that volunteers determined should be brought to the attention of town boards and other officials. These items are presented in an upstream to downstream order, to ease cross-referencing with the Priority Sheets. As these concerns are presented to the relevant Boards and officials further prioritization within each list

may be useful and/or necessary. The Action Plans highlight the concerns. In order for the relevant parties to address the concerns, the following resources are available/should be consulted for specific details:

- 1. Data Sheets:** Appendix B contains all of the original survey data sheets including pipe, wetland, and bridge surveys, photo logs, and narrative summaries. A Survey Data Summary Matrix, which includes information on photographs and data sheets available for each stream section, is included in Appendix B.
- 2. Maps:** The summary map (Figure 1.) and copies of the 36 original survey maps are attached to this report. The survey maps are also included in Appendix B.
- 3. Photographs:** A photographic inventory of over 350 survey photos with captions is organized by Stream Area and is available in Area photo albums. These photographs, which are currently being reviewed, provide further documentation of stream team observations. Pictures from 27 stream sections are also available electronically. (See Appendix B, Data Summary Matrix, for details).
- 4. Priority Sheets:** These may provide context or contain more detail on the specific concern (attached).
- 5. Stream Team Volunteers:** The volunteers who carried out the visual survey may be able to provide more detail on a particular concern due to:
 - a. observations the day of the survey,
 - b. local knowledge; (many volunteers surveyed their neighborhoods and so have access to historical information/patterns;), and
 - c. observations made since the survey.
- 6. Stream Team Steering Committee:** The Steering Committee may be able to provide background information that is valuable to understanding the design and other details of the Shoreline Survey.
- 7. Stream Team Meeting Coordinators:** Mary Michelman and Joan Kimball coordinated the volunteer meetings and were present to hear details that were provided by volunteers verbally, but not on the original data sheets.

b. Short Term and Long Term Projects, Task Force Formation

The Stream Team volunteers met on June 24, 1998 at Acton Town Hall to begin implementing the Action Plans of the Acton Stream Teams. At the beginning of the meeting volunteers reviewed the draft Action Plans and the narrative descriptions of the stream sections, as well as the more than 350 photographs taken during the Shoreline Survey.

Mary Michelman presented an overview of the Stream Teams and summarized the results of the Spring 1998 Acton Shoreline Survey. The volunteers then formed four interest groups or task forces to start working out the logistics for some of the short term and long term projects. These task forces

- Cleanup,
- Stewardship,
- Website, and
- Rail Trail Development/Linkage,

each did some brainstorming, appointed a contact person and then reported its ideas to the whole group. Details on these task forces and their plans can be found in the Results section of this report.

The Acton Stream Team volunteers decided to meet again in the Fall of 1998.

E. Results

1. Survey Highlights:

The consensus opinion of volunteers who conducted the Spring 1998 Acton Shoreline Survey, including the Fort Pond Brook and Nashoba Brook systems, was that in general the streams in Acton visually appear to be in very good shape. There are however some specific problems or needs that should be addressed.

a. Assets

Volunteers used adjectives such as “lovely”, “beautiful”, “natural”, and “gorgeous” to describe their stream sections. One volunteer wrote: “This area is what all streams should look like: clean looking streams flowing through woods with no signs of disruption, erosion or contamination.” Another wrote:

This is a lovely stretch of the brook with tannin stained clear water flowing over sand, gravel and boulders. The vegetation is thick with hardwoods and conifers throughout. Vegetation hangs over the stream with fallen trees in the brook and brush along the banks providing a wealth of habitat for animals. Some small animals were seen as well as a few ducks, frogs and bugs. Fish were not apparent due to the tannin colored water but anglers do come here regularly. If all sections of the brook are as lovely as this one, then we are in great shape.

The Fort Pond Brook and Nashoba Brook stream systems were both found to:

- provide stream habitat supporting abundant and diverse wildlife,
- contain historic sites, and
- provide recreational opportunities including:
 - a. hiking
 - b. canoeing
 - c. fishing and
 - d. scenic views.

b. Problems

A number of potential problems were found to exist in the Fort Pond Brook and Nashoba Brook stream systems.

Both teams noted:

- trash along many stream sections;
- pipes and culverts that needed cleaning and/or other followup;
- areas with a “sheen” on the stream surface;
- areas where buffers were lacking and/or yard waste and other debris were too close to wetlands and stream sections;
- concerns about the impact of future developments on the streams;

- occurrences of phragmites, multiflora rose, duckweed, and loosestrife that may indicate disturbance, or excessive nutrient loading to the streams; and
- concern about dams, both man-made and those made by beavers.

The Nashoba Brook Stream Team noted the presence of old lead-acid railroad batteries along several of the stream segments.

2. Taking Action

a. Information Sharing

The process of information sharing with Town Boards and other officials is currently underway. Many of the named recipients of the "Information Sharing" portion of the Action Plan, including the Conservation Commission, the Board of Health, the Board of Selectmen (as overseers of the Highway Department), and Acton's environmental consultant had representatives as members of the Steering Committee. As such, they were involved in the development of the Acton Stream Teams from the inception of the project. Other interested parties including Acton's Town Manager, Acton's State Representative, the Sewer Action Committee, Municipal Properties, the Health Department, the Department of Natural Resources, the Land Stewardship Committee, the Acton Water District, ACES, and Acton's Earth Day Committee either were represented on the Steering Committee, participated in the Shoreline Survey, or were otherwise kept apprised of progress made by the Stream Teams.

Presentations to relevant Boards/Officials that have already been made include:

- **Acton Conservation Commission:** Presentation took place **July 8, 1998**.
- **Acton Board of Health:** Preliminary presentation took place **June 22, 1998**; follow-up presentation took place **August 10, 1998**.
- **Acton's Environmental Consultant, Woodard & Curran:** Confirmed receipt of Appendix B, including the pipe surveys, all other data sheets, survey maps, draft Priority Sheets and the Data Sheet Summary Matrix on **June 8, 1998**.
- **Acton Board of Selectmen:** Stream Team Priority Sheets, Action Plans, summary map, organizational chart, and cover letter provided to **Town Manager** for the **June 23, 1998** Board of Selectmen meeting packet. A slide presentation to the Board of Selectmen took place **August 18, 1998**.
- **OAR Board of Directors:** A slide presentation took place **September 9, 1998**.

b. Short Term Projects

Short Term Projects included in the Action Plans fell into the following categories:

- Cleanups
- Stewardship
- Buffers

- Outreach/Education
- Land Protection
- Recreation
- Research

Both Stream Teams identified specific sites that needed to be cleaned up. Both teams also concluded that the streams would benefit from public education efforts concerning good stewardship practices and the importance of streamside buffers. The Nashoba Brook Team included the development of a website and a group statement in support of a rail to trail effort as short term projects.

c. Long Term Projects

Long term projects included in the Action Plans fell into the same categories as listed above, under short term projects. Selected highlights of long term projects include the following:

Both teams expressed the desire to improve walking, canoeing, and fishing opportunities and to make this information readily available to the public. Another goal was to minimize the impact of future land development on the streams.

The Nashoba Brook Stream Team included the creation of long term plans/goals for the streams that are based on a conservation land model. Stream maps could be created and made available to the public. This group was also interested in supporting a Rail to Trail effort, maintaining a web site, and researching fisheries.

The Fort Pond Brook Stream Team was interested in the restoration of historic areas and investigating the environmental, engineering and economic impacts of the removal of a man-made dam. This group also wanted to learn the cause of the foam that is sometimes seen floating down Fort Pond Brook, and how, or if, it should be addressed.

d. Stream Team Achievements

The Acton Stream Teams have already experienced success including the formation of task forces to carry out some of their short term and long term projects. (See Table 1 and description below for a summary of Stream Team Achievements.) The task forces, which were formed on June 24, 1998, and their preliminary plans as of that date are outlined below.

1. **Cleanups:** The short term goal of this task force is to organize a September 12, 1998 cleanup of selected stream sites in Acton. This cleanup would coincide with the annual cleanup of the Organization for the Assabet River (OAR). OAR would provide logistical advice as requested. Two or three Acton stream sites that are most in need of a cleanup would be selected. The extent of the cleanup effort would be dependent on volunteer turnout. Long term goals of this task force are to remove the abandoned cars found along

one stream segment, and to assist the Acton Health Department with identifying the appropriate official to provide information about proper disposal of the numerous railroad batteries located along Nashoba Brook.

2. **Stewardship:** The goal of this task force is to raise stream awareness and to provide public education about topics such as runoff, proper disposal of lawn clippings and other yard debris, fertilizer and pesticide use, information on low/no phosphate dishwasher detergents, causes of eutrophication, canoeing opportunities, etc. Information could be made available in:
 - a. **Fact Sheets** – These could include a series of topics and could be sent out to all stream abutters.
 - b. **Town Publications** – Short articles could be placed in *The Municipal Quarterly*, mailed four times a year to all Acton taxpayers and also in *Water Words*, distributed in the spring and fall by the Acton Water District.
 - c. **Websites** – The town of Acton and OAR both have websites, and a website task force will develop an Acton Stream Team website. Each of these websites could be used for the distribution of stewardship information. They also could be linked to each other.
 - d. **Newspaper Articles** - *The Beacon* and the *Northwest Weekly* section of the *Boston Globe* could be contacted to include Stream Team photographs and interviews in future editions.
 - e. **Brochures** – A series of brochures could be created. These should use a recognizable Stream Team logo and include stream maps.
 - f. **Survey Forms** – A mechanism could be put in place for future volunteers to pick up sets of data sheets, survey stream sections, and then return the data sheets to a Steering Committee. This would provide ongoing updates of stream conditions.
3. **Website:** The goals of a Stream Team website are threefold:
 - a. To promote the Acton Stream Teams by providing information to the public about what a Stream Team is and what the Acton Stream Teams can/have achieved;
 - b. To provide information about Acton's streams, including information useful to potential canoeists, and also information about the assets and problems identified during shoreline surveys; and
 - c. To promote stewardship by providing information on how we can all lessen our impact on the streams. Information would be designed for different users, including potential Stream Team volunteers, homeowners, businesses, and visitors to our area.
4. **Rail Trail Development/Linkage:** Along Nashoba Brook, one goal of this task force is to work with surrounding communities and the state to include the abandoned railway along Rte. 27 in North Acton and Rte. 2A in East Acton in a proposed rail trail that will run through Lowell, Chelmsford, and Westford. Another goal is to provide linkage between this rail trail, and the

Assabet River Rail Trail (Marlborough to Acton), via trail connections with nearby conservation areas.

Along Fort Pond Brook a goal of this task force is to create a new trail that would link the existing Overlook Trail in the Meadowview housing development with Jones Field, upstream of Route 27. This trail could be linked with the commuter rail station in South Acton and with the Assabet River Rail Trail. A Stream Team volunteer is willing to raise money for this trail and to build it, but would like to do it in an informal manner. This approach has proved successful in the past, when designing and building the Overlook Trail. This option is currently being explored by the Acton Conservation Commission, the Land Stewards and by at least one Stream Team volunteer.

Benefits of creating this new trail would be a safe, direct route from the Meadowview neighborhood to Jones Field and to the commuter rail, that also provides spectacular views of Fort Pond Brook. Also a volunteer is ready and willing to lead this project, and to get the job done!

The Contact persons of each of the Task Forces will meet together in order to maintain communication between the groups. They will work cooperatively to share information, resources, and to help publicize the activities of each group through every available channel. Both Stream Teams plan to meet again, this fall (after the September 12th Cleanup) at Acton Town Hall.

Achievements of the Acton Stream Teams, (as of October 1, 1998). as a result of the Acton Shoreline Survey include the following:

- **Raised stream awareness:** Over 150 volunteers were involved in some aspect of the effort. There have been four relevant newspaper articles in *The Beacon*, and one in the *Boston Sunday Globe*. Acton Cablevision rebroadcast the April 22, 1998 Volunteer Training Session nine times before May 7, 1998.
- Provided **data for Acton's environmental consultant**, who may use some of the data to help determine appropriate locations for the implementation of Best Management Practices (BMP's) to minimize nutrient input to the streams.
- Created a **photographic inventory** of over 350 photographs.
- Formed four **Task Forces**, (Cleanup, Stewardship, Rail Trail Development/Linkage and Website), described above.
- Distributed six copies of the **Draft Final Report** of The Acton Shoreline Survey, Spring 1998, to reviewers.

- Gave **presentations** to the Acton Board of Selectmen, Acton Board of Health, Acton Conservation Commission, and the OAR Board of Directors.
- Submitted an Acton Stream Team article to the **EPA publication *Watershed Events*** for the fall 1998 issue.
- Organized and carried out a **stream cleanup** on September 12, 1998, along sections of Butter Brook, Coles Brook, Conant Brook, and Fort Pond Brook in Acton. Debris removed from the stream areas, by Stream Team volunteers, included numerous car parts (such as mufflers and pipes, five hubcaps, a headlamp, seven tires, and the grillwork from an old car), two six-foot carved wooden business signs, a shopping cart, other metal debris, a two-foot model train, a horseshoe, two large plastic buckets, about ten large bags of bottles and cans, and about fifteen bags of fast food containers, styrofoam cups, plastic bags, and other miscellaneous litter.
- Distributed **stewardship/public education articles** to Acton taxpayers and water takers in the *Municipal Quarterly* and *Water Words* publications.
- Made shoreline survey results, maps, and narrative descriptions **available online** at: www.ultranet.com/~balkus_p/stream.htm and at www.ultranet.com/~oar/stream.
- Created a **map and photographic display** for the October 5, 1998 Acton Special Town Meeting. The display encourages residents to identify which stream is closest to their home, and also provides information on the importance of stream buffers, and good stewardship practices. The 5-foot high, portable display consists of three panels and features reprinted photographs from the shoreline survey. One panel describes the shoreline survey and includes a 20"X30" map showing Acton streams and major roads. A second panel displays photos of wildlife, historic sites, and recreational opportunities observed during the survey. A third panel features survey photos that illustrate the need for stream buffers.
- Earned a **Certificate of Appreciation** from the **United States Environmental Protection Agency** "in recognition of commitment to the protection and restoration of the nation's water resources".
- Wrote a **final report** on the Acton Shoreline Survey, Spring 1998. A copy will be available at the Acton Memorial Library.
- Scheduled a **public presentation** of the results of the Acton Shoreline Survey for Monday October 26, 1998, at 7:30pm in Acton Town Hall, Room 204. The slide presentation will include photographs taken during the survey that highlight some of the assets and potential problems noted during the survey. This presentation will help to educate the public about good stewardship practices.

- Earned two **“Adopt-A-Stream” Awards**, to be presented to the Nashoba Brook and Fort Pond Brook Stream Teams by Joan Kimball of the **MA Riverways Program**, (Department of Fisheries, Wildlife and Environmental Law Enforcement), immediately following the slide presentation on October 26, 1998.

The Acton Stream Teams look forward to continuing to raise public awareness of the wildlife habitat and recreational opportunities provided by Acton's local streams, and also of ways we can all be better stewards of our rivers and streams.

Certificate of Appreciation

presented to

Acton Stream Teams

*in recognition of commitment to the protection and restoration
of the nation's water resources*



*Adopt
your Watershed*
Robert H. Wayland

Robert H. Wayland, Director
Office of Wetlands, Oceans, and Watersheds
United States Environmental Protection Agency

**EARTH IS
A WATER
PLANET**

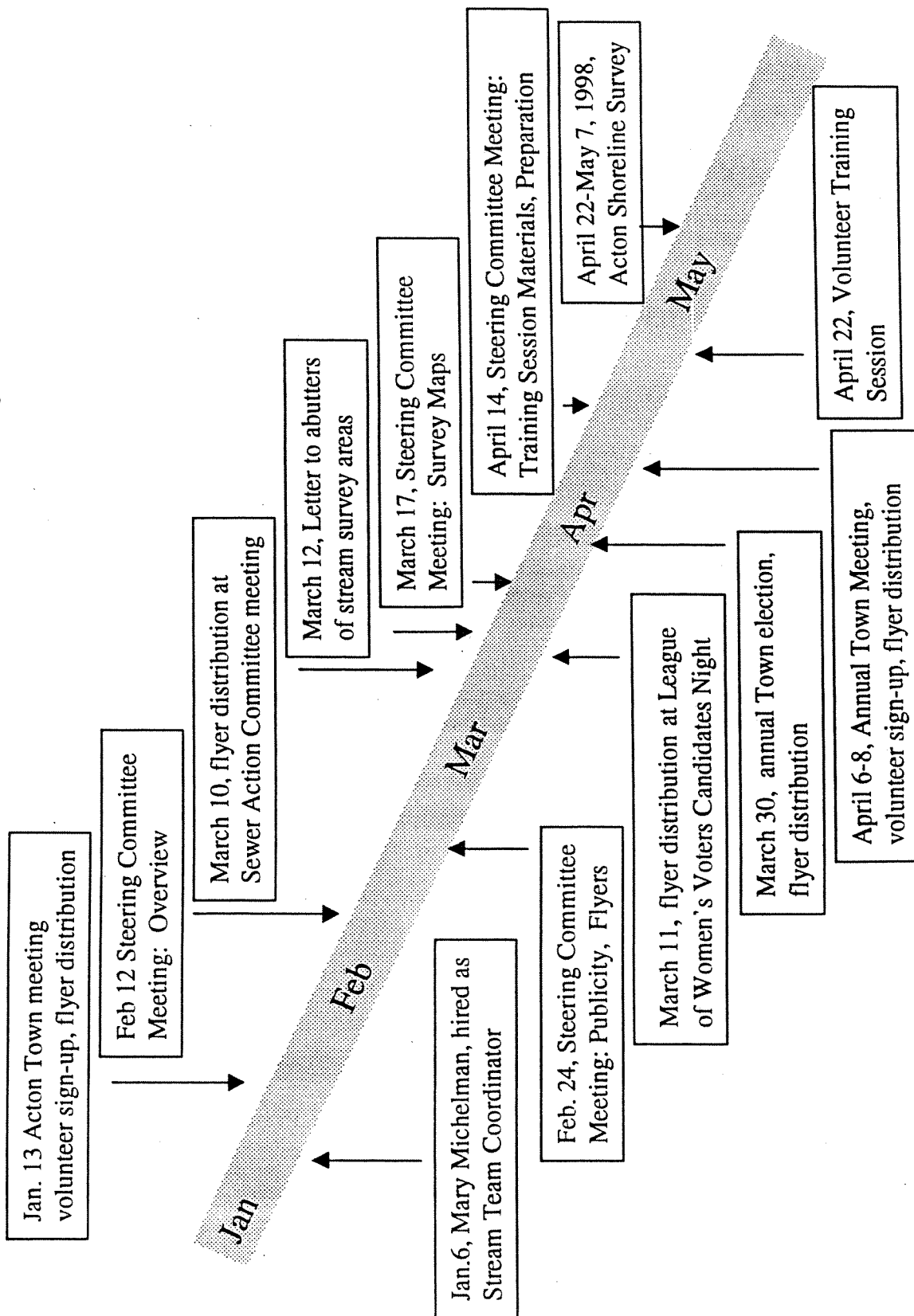


Clean Water Act
ANNIVERSARY

O.A.R. Acton Stream Teams '98

Organization for the Assabet River

Figure 3. Project Timeline: Acton Shoreline Survey Landmarks, Jan-May 1998



O.A.R. Acton Stream Teams '98

Organization for the Assabet River

Figure 3. Project Timeline: Acton Shoreline Survey Landmarks, May-Oct. 1998

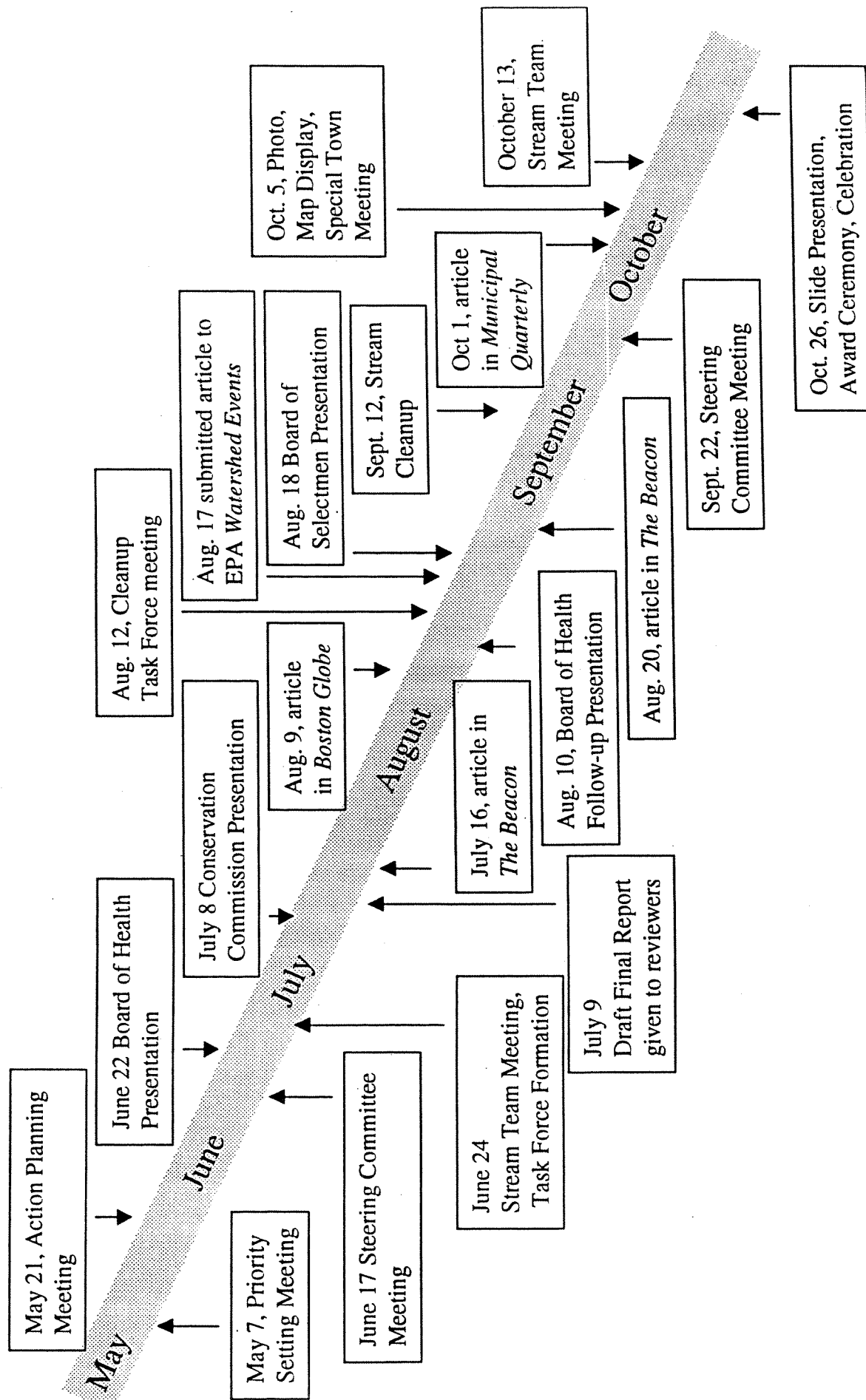




Table 1. Acton Stream Team Achievements

| Achievement (What) | Participants (Who) | How | Date (When) |
|--|--|--|------------------------|
| Raised stream awareness | More than 150 volunteers participated in some aspect of the Stream Team effort. | Newspaper articles (<i>The Beacon</i> : Jan, April, July, Aug., <i>The Boston Sunday Globe</i> , <i>Northwest Weekly</i> Aug.), Cablevision airing of the volunteer Training Session nine times, word of mouth, Stream Team Buttons, t-shirts, flyer distribution, shoreline survey, data management, web page, photographic inventory, followup meetings, follow-up investigations, cleanup etc. | Ongoing |
| Completed Spring 1998 Acton Shoreline Survey: visual survey of 36 stream sections, covering approximately 25 miles in Acton. | More than 120 Acton Stream Team volunteers visually surveyed Acton stream sections | Performed visual surveys of 36 stream sections, covering approximately 25 miles in Acton and completed data sheets, including bridge, pipe and wetland surveys, narrative descriptions, photo logs, survey maps, etc. | April 22-May 7, 1998 |
| Created Photographic Inventory | Shoreline survey volunteers, Ames Department Store, CVS, Creative Camera & Frame Company, Osco Drug, Elinor Gentilman, Mary Michelman, Tom Michelman, Nan Millet, Gwen Murphy, George Riner, Joanne Shusta and the CASE High School and Merriam School students, and Maya Spies. | Photographs taken during survey, camera-related donations by area businesses; data entry of photo logs to create database and captions, photo album assembly. | April 22-June 24, 1998 |

| Achievement (What) | Participants (Who) | How | Date (When) |
|--|---|---|---|
| Provided data for Acton's Environmental Consultant | Acton Stream Teams, Mary Michelman. | Woodard & Curran received copies of data sheets and maps completed during Shoreline survey; draft Priority Sheets, the Summary Map, and a draft Data Sheet Summary Matrix (summarizing which material was completed for each stream segment). | April 22-June 8, 1998 |
| Water testing of "orange-flocked" tributary of Coles Brook | Acton Health Department, alerted by FPCL2 Team (Nancy and Dick Tavernier, Mary Crain Penniman and Bill Brumback). | Fecal coliform testing was negative, believe orange color indicates presence of ferrous oxide, produced by naturally occurring algae and bacteria; area will be rechecked. | Initial test: April 1998; to be rechecked? |
| Initial Presentation to Acton Board of Health | Acton Board of Health (Mark Benedict and Lisa Wolf participated in the survey and are on the Steering Committee; Doug Halley, Health Director is a Steering Committee member), Mary Michelman, Acton Stream Team Coordinator, two residents concerned about septic outbreak at Redstone Condominiums. | Brief presentation of Action Plan "Information Sharing" items relevant to the BOH. | June 22, 1998 |
| Meeting with Acton Town Manager; Stream Team materials provided to Town Manager for Board of Selectmen packets | Acton Town Manager, Don Johnson; MA State Representative Pam Resor; Acton Stream Team Coordinator, Mary Michelman. | Meeting with Town Manager for Stream Team update, and also to schedule presentation to Board of Selectmen. | June 17, 1998: meeting with Town Manager, materials for June 23, 1998 BOS packets |

Table 1. Acton Stream Team Achievements

| Achievement (What) | Participants (Who) | How | Date (When) |
|--|---|--|--|
| Potential trail connection between Overlook Trail and Jones Field being investigated | Fort Pond Brook Stream Team, Section FP6 Team (Sieg Moyr, Gabrielle Watson, Jim and David Corwin), Acton Land Stewards, Acton Conservation Commission and others. | Potential for new hiking trail to connect Overlook Trail and Jones Field was included as a priority item by the FP6 Team. A volunteer is willing to lead trail fundraising, design and building efforts. Members of the Land Stewards have already walked the site. Further investigation by Town officials and others is ongoing. | Ongoing |
| Formation of Stream Cleanup Task Force | Acton Stream Team Cleanup Task Force, Contact Person: Nan Towle Millet. | Task Force formed to address both litter problems that can be addressed by an organized volunteer cleanup, and disposal of other debris that need to be addressed individually. The first effort will be the September 12, 1998 stream cleanup. | Ongoing Cleanup Task Force formed June 24, 1998. |
| Distribution of Stewardship information | Acton Stream Team Stewardship Task Force, Contact Person: Mark Benedict. | Task force will review and develop stewardship material for distribution in fact sheets, town publications, websites, newspaper articles, and brochures. May make survey forms available for ongoing data collection. | Ongoing Stewardship Task Force formed June 24, 1998. |
| Acton Stream Team Website | Acton Stream Team Website Task Force, Contact Persons: Rodney Brown, Cory Stach. | Creation and maintenance of an Acton Stream Team Website. Features will include background information on the Acton Stream Teams and the Acton Shoreline Survey, survey results, maps, and photographs; also cleanup and stewardship information. The website will be updated on an ongoing basis. | Ongoing Website Task Force formed June 24, 1998; Goal to be online by Oct. 26, 1998. |
| Rail Trail Development and Trail Linkages | Acton Stream Team Rail Trail Development/Linkages Task Force, Contact Persons: Sieg Moyr, David Brown. | Task Force will investigate potential rail trail in north and east Acton, and linkages with other communities, Acton Conservation Area trails, and the Assabet River Rail Trail. Also will follow-up on trail linkage with Overlook Trail as described above. | Ongoing Stream Team Rail Trail Development/Linkages Task Force formed June 24, 1998. |

Table 1. Acton Stream Team Achievements

| Achievement (What) | Participants (Who) | How | Date (When) |
|---|--|---|-----------------|
| Draft Final Report of Spring 1998 Acton Shoreline Survey | Written by Mary Michelman, Acton Stream Team Coordinator with editorial advice from Joan Kimball, Tom Michelman, Maya Spies. | Draft Final Report available for review includes acknowledgements, executive summary, project administration and design, volunteer program, results, narrative descriptions of stream sections, Priority Sheets, Action Plans, section maps and sample data sheets. | July 8, 1998 |
| Establishment of a working relationship with the Acton Conservation Commission Conservation Commission will review relevant "Information Sharing" items. | Acton Conservation Commission (Conservation officers Matthew Liebman and Barbara Smith participated in the survey; Matt Liebman and Tom Tidman, Acton Director of Natural Resources, are Steering Committee members), Mary Michelman, Acton Stream Team Coordinator, Acton Stream Team volunteers. | Presentation of overview of the Acton Stream Teams and the Spring 1998 Acton Shoreline Survey, establishment of a working relationship between the Stream Teams and the Conservation Commission. Action Plan "Information Sharing" items relevant to the Conservation Commission will be reviewed by the Commission. | July 8, 1998 |
| Establishment of a working relationship with the Acton Board of Health Acton Health Director will address relevant "Information Sharing" items. | Acton Board of Health (Acton Board of Health members Mark Benedict and Lisa Wolf participated in the survey and are on the Steering Committee; Doug Halley, Health Director, is a Steering Committee member), Mary Michelman, Acton Stream Team Coordinator, Acton Stream Team volunteers. | Slide presentation of overview of the Acton Stream Teams and the Spring 1998 Acton Shoreline Survey, establishment of a working relationship between the Stream Teams and the Board of Health, Acton Health Director given the Board of Health's approval to address the "Information Sharing" items relevant to the Board of Health. | August 10, 1998 |

Table 1. Acton Stream Team Achievements

| Achievement (What) | Participants (Who) | How | Date (When) |
|---|--|---|--|
| Submitted Stream Team article to the EPA publication <i>Watershed Events</i> for its Fall 1998 issue | Mary Michelman, Acton Stream Team Coordinator, Merriam Elementary School and CASE High School students, Acton Stream Teams | Mary Michelman wrote an article describing the Acton Stream Teams and the Spring 1998 Acton Shoreline Survey. The article included a stream survey map that was hand-drawn by students at the CASE High School. and the Merriam Elementary School. Submitted article to EPA publication <i>Watershed Events</i> for its Fall 1998 issue | Submitted article, August 16, 1998 for Fall 1998 publication |
| Presentation to Acton Board of Selectmen The BOS passed a motion to support Stream Team cleanup and stewardship efforts. | Acton Board of Selectmen (Selectman Nancy Tavernier participated in the survey and is a Steering Committee member); Mary Michelman, Acton Stream Team Coordinator, Acton Stream Team volunteers. | Slide presentation of overview of the Acton Stream Teams and the Spring 1998 Acton Shoreline Survey, establishment of a working relationship between the Stream Teams and the Board of Selectmen. The BOS passed a motion to: 1. provide logistical support for the September 12, 1998 Cleanup Day, and 2. assist with public education efforts, including printing Stream Team stewardship articles in <i>"The Municipal Quarterly"</i> that the town publishes and distributes to all Acton taxpayers. | August 18, 1998 |

Table 1. Acton Stream Team Achievements

| Achievement (What) | Participants (Who) | How | Date (When) |
|--|---|--|--|
| September 12, 1998 Stream Cleanup | Acton Stream Team Cleanup Task Force, Contact Person: Nan Towle Millet., Planners participants, and sponsors included: Susan and Ryan Bray, Bill Brumback, Debbie Clough, Dick Hatfield, John Horvath, Michael and Dan Huffaker, Nancy, Don and Daniel Hunton, Matt Liebman, Mary Michelman, Sandra Mika, Nan Towle Millet, Susan Mitchell-Hardt, Nancy O'Hara, Mary Crain Penniman, Pam Resor, Denise Schwartz, Betsy Stokely, Philip Sullivan, The Organization for the Assabet River, The Town of Acton, the Acton Water District, Acton Citizens for Environmental Safety, Acton Ford, ADESA, Amethyst Graphics, Lazaro Paving Co., Nagog Development Co. and Papa Ginos. | A volunteer cleanup of four stream areas along Butter Brook, Coles Brook, Conant Brook, and Fort Pond Brook took place September 12, 1998. The debris that was removed from the stream areas included numerous car parts (such as mufflers and pipes, five hubcaps, a headlamp, seven tires, and the grillwork from an old car), two, six-to-seven foot carved wooden business signs, a shopping cart, other metal debris, a two- foot model train, a horseshoe, two large plastic buckets, about ten large bags of bottles and cans, and about fifteen bags of fast food containers, styrofoam cups, plastic bags, and other miscellaneous litter. | September 12, 1998 cleanup; June 24, 1998: Ongoing Cleanup Task Force formed. |
| Stewardship Task Force submitted article to <i>The Municipal Quarterly</i> which will be mailed to all Acton Taxpayers Oct. 1, 1998 | Nancy Hunton, Stewardship Task Force, Mary Michelman, Doug Halley, Town of Acton | Submitted article about appropriate use of fertilizers, and ideas for stream-friendly leaf disposal, to <i>The Municipal Quarterly</i> . This town publication will be mailed to all Acton Taxpayers with the Oct. 1, 1998 tax bill. | September 1998 |
| Stewardship article to be submitted to the Acton Water District publication, <i>Water Words</i> . | Nancy Hunton, Stewardship Task Force, Jim Deming, Acton Water District | Stewardship article to be submitted to the Acton Water District publication, <i>Water Words</i> . | Oct. 1998 |

Table 1. Acton Stream Team Achievements

| Achievement (What) | Participants (Who) | How | Date (When) |
|---|--|--|---|
| Created map and photographic display | Jim Snyder-Grant, Mary Michelman, Acton Stream Team Coordinator, Acton Stream Teams | Created 20"X30" map showing Acton streams and major roads. Map was included on one panel of a three-panel, 5-foot tall, portable display that also features reprinted photographs from the Shoreline Survey. A second panel displays photos of wildlife, historic sites, and recreational opportunities observed during the survey. A third panel features survey photos that illustrate the importance of stream buffers, and good stewardship practices. | Displayed at Special Town Meeting, Oct. 5, 1998. Can be displayed at future events. |
| US EPA Adopt Your Watershed Certificate of Appreciation | U.S. Environmental Protection Agency, (Patty Scott of the EPA, and Robert H. Wayland, Director, Office of Wetlands, Oceans, and Watersheds, US EPA); Acton Stream Teams, OAR, Mary Michelman | Presented with a Certificate of Appreciation "in recognition of commitment to the protection and restoration of the nation's water resources". | September 1998 |
| Final Report of Acton Shoreline Survey, Spring 1998 | Written by Mary Michelman, Revisions included those based on suggestions by reviewers of Draft Final Report that included: Susan Beede, Julia Blatt, Doug Halley, Joan Kimball, Mary Crain Penniman, Charlotte Sagoff, Tom Tidman, and Lisa Wolf | Final Report includes 2 appendices. Copies distributed to ACES, the Acton Board of Selectmen, the Acton Department of Natural Resources, the Acton Health Department, the Acton Water District, the Acton Memorial Library, the Crossroads Community Foundation, OAR, the Riverways Program, the SuAsCo Basin Team, and the SuAsCo Coalition. | Oct. 1998 |

Table 1. Acton Stream Team Achievements

| Achievement (What) | Participants (Who) | How | Date (When) |
|--|---|--|---|
| <p>Public slide presentation of the Acton Shoreline Survey.</p> <p>Shows survey results and serves as public education in good stewardship practices</p> | <p>Mary Michelman, Acton Stream Team Coordinator; Acton Stream Teams</p> | <p>Slide presentation of overview of the Acton Stream Teams and the Spring 1998 Acton Shoreline Survey, describes survey, results, and future plans; features photographs taken during the survey. Photos highlight wildlife, historic sites, recreational opportunities, trash, pipes and culverts, and the need for stream buffers, noted during the survey.</p> | <p>Scheduled for October 26, 1998, 7:30pm, Acton Town Hall, Room 204</p> |
| <p>Adopt-A-Stream Award Presentations and Celebration</p> | <p>Joan Kimball of the Massachusetts Riverways, Adopt-A-Stream Program; OAR, Town of Acton, Acton Water District and ACES representatives, Acton Stream Team Steering Committee, Acton Stream Teams, Acton residents.</p> | <p>Joan Kimball will present two Adopt-A-Stream Awards to the Acton Stream Teams; one each for the Fort Pond Brook and Nashoba Brook Stream Teams.</p> | <p>Scheduled for October 26, 1998, 7:30pm, Acton Town Hall, Room 204, immediately following the slide presentation.</p> |

Table 1. Acton Stream Team Achievements

O.A.R.

Acton Stream Teams '98



Organization for the Assabet River

Fort Pond Brook Stream Team

Attached Documents